REMARKS

In the Office Action, the Examiner objected to the disclosure; rejected claims 7 and 8 under 35 U.S.C. § 102(e) as being anticipated by Marash et al. (U.S. Patent No. 6,594,367); rejected claim 8 under 35 U.S.C. § 102(b) as being anticipated by Abo-Zena et al. (SIR No. H374); and allowed claims 1-6.

By this Reply, Applicants have amended paragraph [068] of the specification to include the U.S. Patent Application number and U.S. Patent number for the referenced application. Accordingly, the objection to the disclosure should be withdrawn. Applicants have clarified the language of claim 8. No amendments have been made for purposes of patentability.

Applicants respectfully traverse the rejection of claims 7 and 8 under 35 U.S.C. § 102(e) as being anticipated by Marash et al. for at least the reason that Marash et al. fails to disclose every claim element. For example, independent claim 7 recites a combination of elements including, *inter alia*, a shared memory for receiving a plurality of blocks of input samples at a first rate wherein a first block of the plurality of blocks is received in a shared memory at a first time; a processor for reading the plurality of blocks of input samples from the shared memory at a second rate, computing a plurality of partial covariance matrices for the plurality of blocks read from the shared memory, and adding the plurality of partial covariance matrices, wherein the first block of the plurality of blocks is read from the shared memory at a second time, wherein the second time is delayed from the first time and the second rate is greater than the first rate. None of these claim elements is disclosed by Marash et al.

For example, Marash et al. does not disclose the computation of a plurality of partial covariance matrices. Instead, contrary to the Examiner's suggestion, the

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passage at col. 7, lines 30-38 clearly indicates that only a single covariance matrix is determined in the system of Marash et al. Further, Marash et al. is completely silent with respect to any time relationship between when a first block of a plurality of blocks of input samples is received and read from a shared memory. Marash et al. is also silent with respect to any comparisons between rates that the blocks of input samples are received and read from a shared memory.

Marash et al. also fails to disclose every element of independent claim 8. For example, claim 8 recites a combination of elements including, *inter alia*, a shared memory for receiving a plurality of blocks of input samples; a plurality of partial covariance processors for reading the plurality of blocks of input samples from the shared memory wherein each of the plurality of partial covariance processors computes a partial covariance matrix for each block of input samples read by that partial covariance processor; and a processor for adding the partial covariance matrices computed by the plurality of partial covariance processors. Marash et al. fails to disclose any of these claim elements.

Rather than disclosing a plurality of partial covariance processors, the computation of partial covariance matrices, or the adding together of the partial covariance matrices, Marash et al. discloses a system in which just one noise covariance matrix is calculated. Specifically, after determining the single covariance matrix C, this matrix is used to determine the filter coefficients of the beamformer. (col. 7, lines 30-34). Marash et al. nowhere discloses, among other things, a plurality of partial covariance processors or the computation of partial covariance matrices.

Because <u>Marash et al.</u> fails to disclose every claim element of independent claims 7 and 8, the Section 102(e) rejection of these claims is improper and should be withdrawn.

Applicants also respectfully traverse the rejection of claim 8 under 35 U.S.C. § 102(b) as being anticipated by <u>Abo-Zena et al.</u> Like <u>Marash et al.</u>, <u>Abo-Zena et al.</u> also fails to disclose every claim element. Specifically, <u>Abo-Zena et al.</u> fails to disclose, among other things, a plurality of partial covariance processors, the computation of partial covariance matrices, or a processor for adding the partial covariance matrices.

In contrast to the presently claimed embodiment, the system of <u>Abo-Zena et al.</u> calculates only a single covariance matrix R at step 7 in Fig. 1. Based on this single covariance matrix, the system of <u>Abo-Zena et al.</u> performs an eigenanalysis to determine power versus steering direction curves, whose minima are selected as representing potential target candidates. (col. 5, line 67 to col. 6, line 15; col. 6, lines 55-58). The eigenanalysis performed at blocks 15, 17, and 19 does not represent the generation of partial covariance matrices. Rather, at block 23, this analysis merely uses the single covariance matrix determined in step 7 to calculate a power response curve for each of the candidate steering directions identified by blocks 15, 17, and 19. There is no plurality of partial covariance processors, and there is no computation of partial covariance matrices by the plurality of processors. Further, there is no addition of partial covariance matrices by a processor to yield, for example, the single covariance matrix calculated in step 7 of Fig. 1.

Because <u>Abo-Zena et al.</u> fails to disclose every claim element of independent claim 8, the Section 102(b) rejection of claim 8 is improper and should be withdrawn.
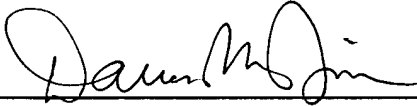
In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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Dated: November 2, 2004   By: _____

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